

PATENT CLAIMS

1. Hub (1) with a hub opening (2) in the front face (8) for pressing onto a base body (3), whereby the hub opening (2) has an insertion area (A2) tapering in the press-on direction, characterized in that in the press-on device, a cylindrical section (A1) is arranged as viewed between the front face (8) and insertion area (A2).
2. Hub (1) according to claim 1, characterized in that the diameter (D1) of the cylindrical section (A1) of the hub opening (2) is at least the same size as the largest diameter of the base body (3), on which the hub (1) is to be pressed.
3. Hub (1) according to claim 1 or 2, characterized in that the hub opening (2) has a second cylindrical section (A3), whereby the second cylindrical section (A3) with reference to the first cylindrical section (A1) is arranged on the opposite side of the insertion area (A2).
4. Hub (1) according to one of claims 1 through 3, characterized in that the tapered insertion area (A2) has a curve profile, whereby the curve profile preferably is formed from circular segments with different radii placed on one another, and whereby the radii of the circular segments are smaller toward the cylindrical section (A1).
5. Hub (1) according to one of claims 1 through 3, characterized in that the insertion region (A2) has a curve profile, whereby the curve profile preferably is formed by an arch (R), which discontinuously connects to the cylindrical section (A1) and preferably opens discontinuously or continuously into the section (A3).
6. Hub (1) according to one of claims 1 through 3, characterized in that the insertion area (A2) is formed by a truncated cone, which connects the sections (A1) and (A3) by means of transition edges (E1) and (E2).
7. Hub (1) according to one of claims 1 through 3, characterized in that the insertion area (A2) is divided into two subsections and both subsections are formed in the shape of a truncated cone along the longitudinal axis (4), and that the cone angle (K1) of the subsection (A2') arranged toward section (A1) is greater than the cone angle (K2) of the subsection (A2'') arranged toward section (A3).

8. Hub (1) according to one of claims 1 through 7, characterized in that the diameter (D2) is at least the same size as the diameter (W2) of the base body (2), whereby the diameter (W2) corresponds to the diameter of the unmachined base body (2).
9. Hub (1) according to one of claims 1 through 8, characterized in that the length of the first cylindrical section (A1) is 2 % to 30 % of the entire length (L) of the hub (1).
10. Hub (1) according to one of claims 1 through 9, characterized in that the length of the second cylindrical section (A3) is 2 % to 30 % of the entire length (L) of the hub (2).
11. Hub (1) according to one of claims 1 through 10, characterized in that the length of the insertion area (A2) includes 40 % to 96 % of the entire length (L) of the hub (2).
12. Hub (1) according to one of claims 7 through 11, characterized in that the ratio of length of the subsection (A2') to the subsection (A2'') lies between 0.1 and 10.
13. Hub (1) according to one of claims 7 through 12, characterized in that the first conical angle (K1) is 10° to 30°.
14. Hub (1) according to one of claims 7 through 13, characterized in that the second conical angle (K2) is 1° to 15°.
15. Hub (1) according to one of claims 1 through 14, characterized in that the hub (1) contains at least one recess (7) extending over the entire length (L) of the hub (4), whereby the recess (7) defines a part of the periphery of the hub opening (2) and the recess (7) extends radially outward at a maximum to the diameter (D1).
16. Cam (9) with a hub (1) according to one of claims 1 through 14.
17. Camshaft including at least one cam (9) according to claim 16 and a base body (3), in particular, a shaft, on which at least one cam (9) is pressed on.

18. System including a base body (3), in particular, a shaft, and a cam (9), whereby the cam (9) has a hub (1) in the front face (8) for pressing onto the base body (3), and whereby the hub (1) has a tapered insertion area (A2), characterized in that upon pressing on of the cam (9), the distance of the point for a first contact between the greatest outer diameter of the base body (3) and the insertion area (A2) is arranged at least 2 % to 30 %, preferably at least 3 % to 20 %, and further preferably, at least 5 % to 15 %, of the entire length (L) of the hub (1) from the front face (8).
19. Camshaft, including at least one cam (9), whereby the cam (9) has a hub (1) with a hub opening (2) for receiving a base body (3) formed as a shaft, whereby the hub opening (2) has an insertion area (A2) tapered in the press-on direction, characterized in that, viewed in the press-on direction, a cylindrical section (A1) is arranged between the front face (8) and the insertion region (A2).